

Listing of the Claims

1 (Currently Amended). A digital imaging system comprising:

- a. an image sensor and a separate display, wherein a sensing device to which said image sensor is coupled is configured to operate independently of a display device to which said separate display is coupled; said separate display being capable of rotating through at least one angle that is independent from the rotation of said image sensor;
- b. an image sensor orientation sensor; a display orientation sensor; and
- c. at least one an image manipulator, wherein one of the sensing device and the display device includes the image manipulator adapted to, which:
 - i) receives image sensor orientation;
 - ii) receives display orientation; and
 - iii) adjusts the image orientation.

2 (Currently Amended). A digital imaging system comprising:

- a. an image sensor ~~configured to for sensing~~ an image subject and to capture a presentation of the image; and a separate display device ~~configured to for displaying~~ said presentation of said image, wherein a sensing device to which said image sensor is coupled is configured to operate independently of said separate display device; said separate display being capable of rotating through at least one angle that is independent from the rotation of said image sensor;
- b. an image sensor orientation sensor ~~configured to for sensing~~ changes in the orientation of an image with respect to a first image sensor base line orientation coordinates; and a display orientation sensor ~~configured to for sensing~~ changes in the orientation of said display device with respect to a second display device base line orientation coordinates; and
- c. at least one an image manipulator, wherein one of the sensing device and the separate display device includes the image manipulator adapted to, which:
 - i) receives image sensor orientation from the image sensor orientation sensor;

- ii) receives display orientation from the display orientation sensor;
and
- iii) adjusts the image orientation in relation to both the image sensor orientation and the display orientation to reconcile said different first and second baseline orientation coordinates.

3 (Original). The digital imaging system of claim 1 wherein the digital imaging system is chosen from the group consisting of still cameras and video cameras.

4 (Original). The digital imaging system of claim 1 wherein the image sensor is a charge coupled device array.

5 (Previously Presented). The digital imaging system of claim 1 wherein either orientation sensor is chosen from the group consisting of electronic gyroscopic sensors, mechanical gyroscopic sensors, and optical gyroscopic sensors.

6 (Original). The digital imaging sensor of claim 1 wherein the image manipulator comprises an image rotation system.

7 (Currently Amended). A digital camera comprising:

- a. a charge coupled device image sensor;
- b. an orientation sensor that detects the orientation of said charge coupled device image sensor relative to gravity; and
- c. means to receive the orientation relative to gravity of a display device capable of displaying the image produced by said charge coupled device image sensor, wherein said display device ~~is configured to operate~~ independently of said digital camera;
- d. at least one image manipulator ~~adapted to~~ which:
 - i) receives said charge coupled device image sensor orientation;
 - ii) receives said display device orientation; and

iii) rotates or transforms the image produced by said charged coupled device image sensor to reconcile differences relative to gravity between said orientation of said charge coupled device image sensor and said orientation of said display device.

8 (Previously Presented). The digital camera of claim 7 wherein the digital camera is chosen from the group consisting of still cameras and video cameras.

9 (Previously Presented). The digital camera of claim 7 wherein the orientation sensor that detects the orientation of said charge coupled device image sensor is chosen from the group consisting of electronic gyroscopic sensors, mechanical gyroscopic sensors, and optical gyroscopic sensors.

10. (Previously Presented). The digital camera of claim 7, wherein said means to receive the orientation of said display device comprise manual entry means.

11 (Previously Presented). The digital imaging system of either claim 1 or claim 2, in which either of said orientation sensors produce three dimensional orientation information, and in which said three dimensional orientation information from either of said orientation sensors is used by said image manipulator to correct said image for keystone, barrel, perspective and other distortions that result when the image sensor is located off of the perpendicular axis with respect to the plane of the image being sensed.

12 (Previously Presented). The digital camera of system of claim 7, in which said orientation sensor that detects the orientation of said charge coupled device image sensor produces three dimensional orientation information, and in which said three dimensional orientation information is used by said image manipulator to correct said image for keystone, barrel, perspective and other distortions that result when the image sensor is located off of the perpendicular axis with respect to the plane of the image being sensed.

13 (Previously Presented). The digital imaging system of either claim 1 or claim 2, wherein either orientation sensor is chosen from the group consisting of microelectromechanical gyroscopic orientation sensors capable of sensing rotations in two dimensions, microelectromechanical gyroscopic orientation sensors capable of sensing rotations in three dimensions, optical gyroscopic orientation sensors capable of sensing rotations in two dimensions, optical gyroscopic orientation sensors capable of sensing rotations in three dimensions, mechanical gyroscopic orientation sensors capable of sensing rotations in two dimensions, mechanical gyroscopic orientation sensors capable of sensing rotations in three dimensions, pendulum orientation sensors capable of sensing rotation in two dimensions, and pendulum orientation sensors capable of sensing rotation in three dimensions.

14 (Previously Presented). The digital camera of claim 7, wherein said orientation sensor that detects the orientation of said charge coupled device image sensor is chosen from the group consisting of microelectromechanical gyroscopic orientation sensors capable of sensing rotations in two dimensions, microelectromechanical gyroscopic orientation sensors capable of sensing rotations in three dimensions, optical gyroscopic orientation sensors capable of sensing rotations in two dimensions, optical gyroscopic orientation sensors capable of sensing rotations in three dimensions, mechanical gyroscopic orientation sensors capable of sensing rotations in two dimensions, mechanical gyroscopic orientation sensors capable of sensing rotations in three dimensions, pendulum orientation sensors capable of sensing rotation in two dimensions, and pendulum orientation sensors capable of sensing rotation in three dimensions.

15 (Withdrawn). The device of either claim 1 or claim 2, in which the image sensor is selected from the group consisting of vacuum tubes, vidicon tubes, or plumbicon tubes.

16 (Withdrawn). The device of claim 15, in which the image manipulator alters the deflection axis of a scan beam of said vacuum tubes, vidicon tubes or plumbicon tubes in response to said image orientation sensor, thereby adjusting said image orientation.

17 (Currently Amended). A display for an image produced by an image sensor component of a digital imaging system, wherein said image sensor is ~~configured to~~ operates independently of a display device to which said display is coupled, and wherein said display is capable of rotating through at least one angle that is independent from the rotation of said image sensor; said display comprising:

- a. a display orientation sensor;
- b. means to receive the orientation of said image sensor;
- c. an image manipulator ~~adapted to~~ which:
 - i) receives said image sensor orientation;
 - ii) receives display orientation; and
 - iii) adjusts the image orientation.

18. (Previously Presented). The display of claim 17, wherein said means to receive the orientation of said image sensor comprise manual entry means.

19 (Previously Presented). The display of claim 17 wherein the display is chosen from the group consisting of mobile displays, cell phone video displays, and liquid crystal displays.

20 (Previously Presented). The display of claim 17 wherein the image manipulator comprises an image rotation system.

21 (Previously Presented). The display of claim 17, in which said orientation sensor that detects the orientation of said display produces three dimensional orientation information, and in which said three dimensional orientation information is used by said image manipulator to correct said image for keystone, barrel, perspective and other distortions that result when the display or image sensor is located off of the perpendicular axis with respect to the plane of the image being sensed.

22 (Previously Presented). The display of claim 17 wherein said display orientation sensor is chosen from the group consisting of electronic gyroscopic sensors, mechanical gyroscopic sensors, and optical gyroscopic sensors.

23 (Previously Presented). The display of claim 17, wherein said display orientation sensor is chosen from the group consisting of microelectromechanical gyroscopic orientation sensors capable of sensing rotations in two dimensions, microelectromechanical gyroscopic orientation sensors capable of sensing rotations in three dimensions, optical gyroscopic orientation sensors capable of sensing rotations in two dimensions, optical gyroscopic orientation sensors capable of sensing rotations in three dimensions, mechanical gyroscopic orientation sensors capable of sensing rotations in two dimensions, mechanical gyroscopic orientation sensors capable of sensing rotations in three dimensions, pendulum orientation sensors capable of sensing rotation in two dimensions, and pendulum orientation sensors capable of sensing rotation in three dimensions.